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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/018,896	12/14/2001	Armin Rettig	FA-1047	6106

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10/08/2003

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EXAMINER

MICHENER, JENNIFER KOLB

ART UNIT

PAPER NUMBER

1762

DATE MAILED: 10/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/018,896	Applicant(s) RETTIG ET AL.	
	Examiner Jennifer Kolb Michener	Art Unit 1762	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/14/2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-33 is/are pending in the application.
- 4a) Of the above claim(s) 33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-32 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7/29/02
05 4/17/02
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

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DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C.

121:

- I. Claims 10-32, drawn to a method of coating, classified in class 427, subclass 142.
- II. Claim 33, drawn to a coated object, classified in class 428.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions I and II are related as process of making and product made.

The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by another and materially different method such as repairing the substrate with a solution, instead of a powder, or curing the coating with UV rays instead of IR. Additionally, the process as claimed can be used to make other and materially different products, such as repaired oil tanks instead of cars.

3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

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4. Because these inventions are distinct for the reasons given above and the search required for Group I is not required for Group II, restriction for examination purposes as indicated is proper.

5. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

6. During a telephone conversation with Hilmar Fricke on 9/30/2003 a provisional election was made without traverse to prosecute the invention of Group I, claims 10-32. Affirmation of this election must be made by applicant in replying to this Office action. Claim 33 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

7. Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164

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USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claim 10 is rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claim 1 of U.S. Patent No. 6,531,189. Although the conflicting claims are not identical, they are not patentably distinct from each other because the application and infrared curing of the powder coating of the patent is inclusive of the smaller area requiring curing in the instant application.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

13. Claims 10-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fujisawa et al. (4,960,611).

Fujisawa et al. teaches a method of repairing a defect on a multi-layer automotive paint coating (col. 1, lines 10-20) by applying a powder coating to the defective area and using infrared radiation to melt and cure the powder coating (col. 2, line 32; col. 3, lines 14-18; col. 7, line 20).

Fujisawa's teaching of "infrared" range, defined as 700nm –1mm, overlaps

Applicant's claimed range of "near infrared" in claim 30.

Overlapping ranges are *prima facie* evidence of obviousness. It would have been obvious to one having ordinary skill in the art to have selected the portion of

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Fujisawa's range that corresponds to the claimed range. *In re Malagari*, 184 USPQ 549 (CCPA 1974).

The coating of Fujisawa is polished after repair, as required by claim 11 (col. 1, line 65; col. 7, line 31).

The coating to be repaired in the method of Fujisawa is multi-layered as outlined above, as required by claim 12, and may comprise a transparent topcoat, for example, as required by claims 13, 15, and 18 (see also col. 2, line 47).

Regarding the limitation of claim 14 that the coating to be repaired is a powder coating, it is Examiner's position that it is well-known in the art of coating automobiles to use a powder coat. It would have been obvious to an ordinary artisan to use a powder coat composition in a method of originally painting an automobile body, that may later need a powder repair paint.

Regarding claim 16, Fujisawa teaches using water in the powder coating, thus creating an aqueous "slurry" as required by Applicant (col. 3, line 25).

Regarding claim 17, while Fujisawa does not specifically teach that the solids content of the powder coating be the same as the coating to be repaired, Examiner notes that he does teach matching the color of the repair powder, or lack thereof, to that of the original coating. It is Examiner's position that it would

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have been obvious to one of ordinary skill in the art to also match the repair composition contents to the original coating to create a flawless finish.

Regarding claim 19, Fujisawa teaches the use of epoxy resins and acrylic resins and the like as the binder and carboxyl-containing resin curing agents (col. 3). It is Examiner's position that carboxyl-containing curing agents are inclusive of resins having at least two carboxyl groups, as required by the claim. Additionally, while Fujisawa does not specifically teach the combination of epoxy and acrylic resin with the acrylic content listed, it is Examiner's position that it would have been obvious to an ordinary artisan that the combination of two suitable agents would have been expected to provide the superior qualities of both the ingredients for successful results on the finished product. Selection of the amount of epoxy, based on the desired properties of the resin compound would have been within the skill of an ordinary artisan desiring to optimize the matching characteristics to the original coating. Likewise, regarding claims 20-21, Fujisawa teaches that selection of a suitable curing agent will be based on the reactivity of the binder resin. Since Fujisawa teaches selection of a suitable carboxyl-containing curing agent based on an epoxy/acrylic resin, it would have been obvious to one of ordinary skill in the art to select the specific carboxylic acids required by the claims, for suitable use with the epoxy/acrylic resin of Applicant, because the group taught by Fujisawa is inclusive of such agents.

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Regarding claim 22, the powder coating composition of Fujisawa is heat-curable, as outlined above and is cross-linked via an included crosslinking agent (col. 3, line 37). Regarding claims 23-24 and 26 depending therefrom, Fujisawa teaches binder or base resins and curing agents which have at least two reactive functional groups between the two of them, such as a polyisocyanate (col. 3, lines 29-40), with a binder (base resin) of polyester (col. 3, line 30). Fujisawa teaches the use of carboxyl-containing functional groups.

Regarding claims 25 and 27, requiring a range of binder to curing agent ratios and molecular weight, it is Examiner's position that selection of the optimum concentration and weight of ingredients would have been within the skill of an ordinary artisan based on the type of coating in need of a matching repair.

Regarding claim 28, Fujisawa teaches the inclusion of inorganic pigments, fillers, catalysts, and the like (col. 3).

Regarding claim 29, Fujisawa does not specifically teach the particle size of the powder repair coating. However, it is Examiner's position that selection of an optimum size of particle would have been within the skill of an ordinary artisan based upon the size of the defect to be filled and the strength and length of time desired for treatment by IR since surface area of powder particles will affect the amount of radiation time needed.

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It is well settled that determination of optimum values of cause effective variables such as these process parameters is within the skill of one practicing in the art.

In re Boesch, 205 USPQ 215 (CCPA 1980).

Regarding claim 31, Fujisawa teaches curing a coating composition in a minute speck, meeting the limitation of a "point".

Regarding claim 32, Fujisawa teaches heating, such as by hot air, (col. 6, line 30) in addition to the IR curing. The use of heating is inclusive of a convection oven. It would have been obvious to an ordinary artisan to select convection from the class of "heaters" taught by Fujisawa with the expectation of successfully providing the hot air heating required by Fujisawa.

Conclusion

14. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Diener teaches the use of infrared radiation in repair coating automotive multi-layer lacquer coatings, using a binder and curing agent. Dannenhauer teaches repairing small defects in powder coating layers by filling with a powder coating and irradiating with infrared.

15. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jennifer Kolb Michener whose telephone

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number is 703-306-5462. The examiner can normally be reached on Monday through Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Shrive P. Beck can be reached on 703-308-2333. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0661.

A handwritten signature in black ink, appearing to read "Jennifer Kolb Michener". The signature is fluid and cursive, with the first name "Jennifer" and last name "Michener" being more legible than the middle name "Kolb".

Jennifer Kolb Michener
Patent Examiner
Technology Center 1700
September 30, 2003